The Texas Commission on Environmental Quality (TCEQ, agency, or commission) proposes amendments to §§117.10, 117.400, 117.403, 117.8000, and 117.9030.

If adopted, amended §§117.10, 117.400, 117.403, 117.8000, and 117.9030 will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the state implementation plan (SIP).

Background and Summary of the Factual Basis for the Proposed Rules

The Federal Clean Air Act (FCAA) requires states to submit plans to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS) for nonattainment areas designated with a classification of moderate or higher. The Dallas-Fort Worth (DFW) 2008 eight-hour ozone nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, was classified as a moderate nonattainment area for the 2008 eight-hour ozone NAAQS of 0.075 parts per million (ppm) with a July 20, 2018 attainment deadline. Based on 2017 monitoring data, the DFW area did not attain the 2008 eight-hour ozone NAAQS and did not qualify for a one-year attainment date extension in accordance with FCAA, §181(a)(5). The EPA proposed to reclassify the DFW area to serious nonattainment for the 2008 eight-hour ozone NAAQS as published in the November 14, 2018 Federal Register (83 FR 56781). On August 7, 2019, the EPA signed the final reclassification notice.

With the final reclassification to serious nonattainment, the state is required to submit a SIP revision to fulfill the nitrogen oxides (NO_x) reasonably available control technology (RACT) requirements mandated by FCAA, §172(c)(1) and §182(f). Although the eight-county Houston-Galveston-Brazoria (HGB) area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) was also reclassified to serious nonattainment for the 2008 eight-hour ozone NAAQS, the commission determined that RACT is in place for all emission source categories in the HGB area; therefore, there are no changes proposed in this rulemaking that affect the HGB area.

The EPA's *Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements*; Final Rule, published in the *Federal Register* on March 6, 2015 (80 FR 12264), specifies an attainment date of July 20, 2021 for serious nonattainment areas. FCAA, §172(c)(1) requires the state to submit a SIP revision that incorporates all reasonably available control measures, including RACT, for sources of relevant pollutants. FCAA, §182(f) requires the state to submit a SIP revision that implements RACT for all major sources of NO_x. The EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53761, September 17, 1979).

Depending on the classification of an area designated nonattainment for a NAAQS, the

major source threshold that determines what sources are subject to RACT requirements varies. Under the 1997 eight-hour ozone NAAQS, the DFW area consisted of nine counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) and was classified as a serious nonattainment area. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold for sources in an area to prevent backsliding (80 FR 12264). For this reason, the major source emission threshold for those nine counties remains at the level required for serious nonattainment areas, which is the potential to emit (PTE) of 50 tons per year (tpy) of NO_x. Wise County was not part of the DFW 1997 eight-hour ozone NAAQS nonattainment area but was included as part of the DFW 2008 eight-hour ozone NAAQS nonattainment area; therefore, the major source threshold for Wise County is based on a classification of moderate under the 2008 standard, which is the PTE of 100 tpy of NO_x. With reclassification of the DFW area to serious nonattainment under the 2008 eight-hour ozone NAAQS, the major source emission threshold for all 10 counties, including Wise County, is the PTE of 50 tpy of NO_x emissions. This proposed rulemaking would implement RACT in Wise County to reflect this change in the major source threshold for Wise County. The emission reduction requirements from this proposed rulemaking would result in reductions in ozone precursors in Wise County. The proposed compliance date for implementing control requirements and emission reductions for the DFW area is July 20, 2021, the attainment date for serious nonattainment areas under the 2008 eight-hour ozone NAAQS.

The proposed rulemaking would revise Chapter 117 to implement RACT for all major sources of NO_x in the DFW area as required by FCAA, §172(c)(1) and §182(f). The commission previously adopted Chapter 117 RACT rules for sources in the DFW area as part of the SIP revision adopted May 23, 2007 (Rule Project Number 2006-034-117-EN) for the 1997 eight-hour ozone standard, and the EPA approved these rules on December 3, 2008 (73 FR 73562). The commission adopted Chapter 117 RACT rules for sources in the DFW area as part of a SIP revision adopted July 3, 2015 (Rule Project Number 2013-049-117-AI) for the 2008 eight-hour ozone standard for the moderate nonattainment area, and the EPA approved these rules on September 22, 2017 (82 FR 44320).

The commission proposes amendments to the following sections associated with the DFW 2008 eight-hour ozone RACT rulemaking: Subchapter A, Definitions, §117.10; Subchapter B, Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas, Division 4, Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources, §117.400 and §117.403; Subchapter G, General Monitoring and Testing Requirements, Division 1, Compliance Stack Testing and Report Requirements, §117.8000; and Subchapter H, Administrative Provisions, Division 1, Compliance Schedules, §117.9030.

The commission proposes clarifications and minor revisions that would affect sources

in other areas covered by Chapter 117, including proposed changes to stack testing provisions for compliance flexibility for stationary reciprocating internal combustion engines and clarifying the restriction on operating hours for exempt stationary diesel and dual-fuel engines located at major sources of NO_x in the nine-county DFW area, excluding Wise County. These proposed changes are discussed in detail in the Section by Section Discussion section of this preamble.

The commission proposes to revise Chapter 117, Subchapter B, Division 4 to change the requirements for major industrial, commercial, or institutional (ICI) sources of NO_x in Wise County to address NO_x RACT requirements for serious nonattainment areas. Proposed revisions to Chapter 117, Subchapter B, Division 4 would require some owners or operators of major ICI sources of NO_x in Wise County to reduce NO_x emissions from certain stationary sources and source categories to satisfy RACT requirements. Identical to the definition of a major source in the other nine DFW area counties, a major source of NO_x in Wise County is any stationary source or group of sources located within a contiguous area and under common control that emits or has a PTE equal to or greater than 50 tpy of NO_x . In this proposed rulemaking, newly identified process heaters and stationary internal combustion gas-fired engines would be subject to existing controls in Wise County. The proposed rulemaking would also extend rule applicability to incinerators, a newly identified stationary source category in Wise County. Proposed revisions to Chapter 117, Subchapter B, Division 4 would also extend applicability of existing monitoring, testing, recordkeeping, and reporting

requirements associated with Chapter 117, Subchapter B, Division 4 to the affected sources located in Wise County. These requirements are necessary to ensure compliance with the existing emission specifications and to ensure that NO_x emission reductions are achieved from the units that become subject to the requirements of Chapter 117, Subchapter B, Division 4. Specific discussion associated with the proposed emission specifications and other requirements in the proposed revisions to Chapter 117, Subchapter B, Division 4 are provided in the Section by Section Discussion section of this preamble.

The commission estimates that this proposed rulemaking would result in a 0.26 tons per day reduction of NO_x from major ICI sources in Wise County. In the RACT rules adopted for the May 23, 2007 DFW SIP revision, the state fulfilled NO_x RACT requirements for the nine-county DFW 1997 eight-hour ozone serious nonattainment area through adoption of emissions specifications in §117.410. In the RACT rules adopted for the July 10, 2015 DFW SIP revision, the state fulfilled NO_x RACT requirements for the 10-county DFW 2008 eight-hour ozone moderate nonattainment area through adoption of RACT emissions specifications for Wise County in §117.405. With this proposed rulemaking, the commission implements and fulfills NO_x RACT requirements for major sources of NO_x in Wise County with a PTE of 50 tpy of NO_x .

Section by Section Discussion

In addition to the proposed amendments associated with implementing RACT for the

DFW area and specific minor clarifications and corrections discussed in greater detail in this section, the proposed rulemaking also includes various stylistic, non-substantive changes to update rule language to current *Texas Register* style and format requirements. Such changes include appropriate and consistent use of acronyms, section references, rule structure, and certain terminology. These changes are non-substantive and generally are not specifically discussed in this preamble. Comments received regarding sections and rule language associated only with reformatting and minor stylistic changes will not be considered, and no changes will be made based on such comments.

Subchapter A: Definitions

§117.10, Definitions

The commission proposes to revise the definition of "Major source" in §117.10(29). Proposed changes include revision to §117.10(29)(B) to remove all references to county names and insert a reference to the term "Dallas-Fort Worth eight-hour ozone nonattainment area" to reflect the change in classification status for Wise County and the deletion of existing §117.10(29)(C). The applicability threshold for Wise County is now the same as that for the other nine counties included in the DFW ozone nonattainment area and separating Wise County from the other nine DFW area counties is no longer necessary. Proposed changes also include re-lettering existing §117.10(29)(D) and (E) to §117.10(29)(C) and (D) to accommodate the deletion of existing §117.10(29)(C). No substantive changes are intended to be made to existing

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subparagraphs (D) and (E).

Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas

Division 4: Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources To address RACT requirements for major sources of NO_x at the new 50 tpy major source threshold located in Wise County, the commission proposes revisions to Subchapter B, Division 4 that would include amending rules applicable to any major stationary source of NO_x in Wise County that emits or has a PTE of 50 tpy of NO_x . The commission proposes to expand the list of applicable unit types at major ICI stationary sources of NO_x in Wise County in proposed Subchapter B, Division 4. The commission also proposes technical corrections to exemption provisions for units located at major ICI stationary sources in the nine counties of the DFW 2008 eight-hour ozone nonattainment area, excluding Wise County, i.e. Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties.

§117.400, Applicability

The commission proposes revisions to §117.400 to clarify which unit types located in specific counties in the DFW eight-hour ozone nonattainment area would be subject to the proposed revisions of Subchapter B, Division 4. The commission is not proposing to change the current list of applicable units located at major sources of NO_x in existing §117.400(a) for units located in Collin, Dallas, Denton, Ellis, Johnson,

Kaufman, Parker, Rockwall, or Tarrant County. The commission proposes $\S117.400(b)(4)$ to specify a new unit category, incinerators, located at major sources of NO_x located in Wise County. The commission identified five incinerators in the 2017 point source emissions inventory (EI) at major sources of NO_x in Wise County.

§117.403, Exemptions

The commission proposes revisions to §117.403 to clarify exemption criteria for units that would be exempt from specified requirements of Subchapter B, Division 4. The commission is not proposing to change the current list of exempt unit types, sizes, or uses in existing §117.403(a) for units located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County. However, as part of this rulemaking, the commission is proposing technical revisions intended to correct inadvertent errors in existing §117.403(a), made during a previous rulemaking adopted May 23, 2007 (Rule Project Number 2006-034-117-EN), to ensure consistency with the agency's intent. The commission proposes to require new and existing stationary diesel and dual-fuel engines claimed exempt under existing §117.403(a) to comply with the operating hours restriction requirements of existing §117.410(f) by adding a rule reference to §117.410(f) in §117.403(a). This clarification is proposed to be consistent with existing recordkeeping requirements in §117.445(f)(9) that are already referenced in §117.403(a) and that relate to the operating requirements in §117.410(f).

Existing §117.410(f) prohibits any person from starting or operating any stationary

diesel or dual-fuel engine in any of the nine DFW area counties, which excludes Wise County, for testing or maintenance of the engine itself between the hours of 6:00 a.m. and noon, except for specific manufacturer's recommended testing requiring a run of over 18 consecutive hours; to verify reliability of emergency equipment (e.g., emergency generators or pumps) immediately after unforeseen repairs; or firewater pumps for emergency response training conducted from April 1 through October 31. When this rule was adopted for the nine-county area as part of a May 23, 2007 rulemaking under the 1997 eight-hour ozone NAAQS (Rule Project Number 2006-034-117-EN), the provision was identical to a requirement implemented for the HGB ozone nonattainment area. The requirement delays starting or operation of these engines for testing or maintenance until after noon to help reduce NO_x emissions and limit ozone formation. Owners or operators of these engines are required under existing §117.445(f)(9) to maintain records of each time the engine is operated for testing and maintenance, including: dates of operation; start and end times of operation; identification of the engine; and total hours of operation for each month and for the most recent 12 consecutive months. Existing §117.403(a) already references the recordkeeping requirements of §117.445(f)(9) but does not currently reference the actual operating restrictions of §117.410(f). This proposed change would be a technical correction to add the operating restrictions reference for engines located at major sources of NO_x in the nine DFW area counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties).

Based on 2017 point source Emissions Inventory (EI) data, the commission identified 40 stationary diesel and dual-fuel engines located in the nine counties for which the owner or operator may currently claim exemption under existing §117.403(a), specifically as backup, standby, firewater pump, or emergency engines and generators. If adopted with this current rulemaking action, the operating restrictions under §117.410(f) would apply to stationary diesel and dual-fuel engines claimed exempt located at NO_x major sources in the nine-county DFW area, excluding Wise County, and would prohibit their operation for testing or maintenance between 6:00 a.m. and noon, similar to the existing requirements for exempt units located at major and minor sources of NO_x in the HGB area and at minor sources of NO_x in the nine counties for the DFW area. For such units typically used in emergency situations or designated as low-use engines, the commission does not expect this proposed requirement to interfere with or restrict the normal operation of these engines. The commission has stated this in prior rulemaking actions concerning these provisions in Chapter 117 (26 TexReg 8110 and 32 TexReg 3206). The commission does not expect non-exempt units to be affected because these engines should already be complying with the operating restrictions and maintaining appropriate records.

The commission proposes §117.403(b)(6) to exempt flares and proposes §117.403(b)(7) to exempt incinerators with a maximum rated capacity less than 40 million British thermal units per hour. These proposed exemptions for these unit types located at major sources of NO_x in Wise County are consistent with existing exemptions for the

nine counties of the DFW 1997 eight-hour ozone nonattainment area in existing \$117.403(a)(3). The commission identified five incinerators in the 2017 point source EI at major sources of NO_x in Wise County that would qualify for exemption under proposed \$117.403(b)(7). Because these incinerators currently qualify for exemption based on heat input, the commission is not currently proposing emission specifications for incinerators located in Wise County.

The commission identified 17 stationary diesel-fired engines in the 2017 point source EI located at major sources of NO_x in Wise County. All 17 units were reported to the commission by regulated entities as emergency backup diesel engines and generators. An existing exemption in §117.403(b)(3) exempts all stationary diesel, reciprocating internal combustion engines located at NO_x major sources in Wise County. Because the commission did not identify a stationary diesel engine used for any other purpose other than for emergency backup situations, the commission is not currently proposing emission specifications for this category of equipment located in Wise County. These engines will continue to be exempt from the requirements in Subchapter B, Division 4.

Subchapter G: General Monitoring and Testing Requirements

Division 1: Compliance Stack Testing and Report Requirements

§117.8000, Stack Testing Requirements

The commission proposes §117.8000(f)(1) - (4) to specify the requirements of using an

alternate test method when performing emissions testing on stationary internal combustion engines. Stack testing provisions for emissions testing of NO_x and carbon monoxide (CO) under Chapter 117 currently specify certain EPA-approved compliance reference test methods. Proposed §117.8000(f) would allow owners or operators of stationary internal combustion engines that trigger the stack testing requirements of Subchapter G, Division 1 to use American Society for Testing and Materials (ASTM) Method D6348-03 to measure the emissions of NO_x and CO from stationary internal combustion engines in lieu of the EPA Reference Test Methods 7E or 20 for NO_x, and 10, 10A, or 10B for CO, as currently specified in existing §117.8000(c), when demonstrating compliance with an applicable emission standard under Chapter 117. All other applicable requirements for emissions testing in existing §117.8000(c) would continue to apply. For example, if the owner or operator is required to test for oxygen or ammonia emissions, the owner or operator would be required to continue to use the EPA reference test methods for oxygen or ammonia as specified in §117.8000(c). Proposed §117.8000(f)(1) specifies that the owner or operator electing to use ASTM Method D6348-03 shall notify the appropriate regional office and any local air pollution control agency having jurisdiction in writing at least 15 days prior to the date that the emissions performance test occurs. The commission also proposes in §117.8000(f)(2) that the analyte spiking procedure of Annex A5 to ASTM Method D6348-03 must be performed using NO_x calibration gas standards certified for total NO_x. The owner or operator electing to use ASTM Method D6348-03 to determine NO_x emissions from an engine may use any gas combination as long as it is a certified EPA

protocol gas. The term "Nitrogen oxides (NO_x) " is defined in existing §117.10(34). This would allow owners or operators to use nitric oxide, nitrogen dioxide, or any combination thereof so long as the components of the certified calibration gas do not interfere with the gas being detected.

To ensure strict adherence to all requirements of ASTM Method D6348-03 and associated Annexes A1 through A8 to ASTM Method D6348-03, the commission proposes §117.8000(f)(3) to require owners or operators electing to use the ASTM method to document in the compliance stack report required by existing §117.8010 that the owner or operator followed all such requirements, including all quality assurance and quality control procedures of all eight annexes. These proposed requirements would be in addition to the existing requirements of §117.8010 that the test report must contain the information specified in existing §117.8010.

The commission proposes §117.8000(f)(4) to specify that minor modifications to ASTM Method D6348-03 would be allowed for owners or operators electing to use the ASTM method as long as those minor modifications meet the conditions of existing §117.8000(d)(1) and (2).

The commission proposes these changes in an effort to afford compliance flexibility to owners or operators of stationary engines triggering emissions performance testing under Chapter 117. The EPA has already approved the use of ASTM Method D6348-03

for stationary compression-ignited and spark-ignited internal combustion engines under 40 Code of Federal Regulations Part 60, Subparts IIII and JJJJ, respectively. Because the commission is unaware of the EPA approving the use of ASTM Method D6348-03 for emission unit types other than for stationary internal combustion engines, the commission is not proposing use of ASTM Method D6348-03 for any other emission unit type covered by Chapter 117.

Subchapter H: Administrative Provisions

Division 1: Compliance Schedules

§117.9030, Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources

The commission proposes changes to the compliance schedule for major sources of NO_x located in Wise County in existing §117.9030(a) for units subject to the emission specifications of §117.405, including revised dates for submittal of the initial and final control plan and the final rule compliance deadline for the proposed rule changes in Chapter 117, Subchapter B, Division 4. Proposed §117.9030(a)(1)(A) would preserve prior compliance deadlines for submittal of the initial control plan and all other requirements of Chapter 117, Subchapter B, Division 4 for units subject to the emission specifications of §117.405 that were subject to the prior definition of "Major source" for Wise County in §117.10(29)(C) before the effective date of the current rulemaking. The commission proposes to move the requirements of existing \$117.9030(a)(1)(A) to proposed \$117.9030(a)(1)(A)(i). The commission proposes to

move the requirements of existing §117.9030(a)(1)(B) to proposed §117.9030(a)(1)(A)(ii). Existing §117.9030(a)(1)(A) and (B) are proposed for deletion. These changes are intended to provide clarity and distinguish between the prior compliance deadline of January 1, 2017 in proposed §117.9030(a)(1)(A) and the proposed deadline of July 20, 2021 in proposed §117.9030(a)(1)(B). They are not intended to change the existing requirements for those units that had a rule compliance deadline of January 1, 2017.

The commission proposes $\S117.9030(a)(1)(B)$ to specify the requirements for units subject to the emission specifications of $\S117.405$ on or after the effective date of this rulemaking that would have a compliance deadline of July 20, 2021. Proposed subparagraph (B)(i) would specify that owners or operators of stationary sources of NO_x in Wise County subject to the requirements of $\S117.405$ would be required to submit the initial control plan required by $\S117.450$ no later than January 15, 2021. Proposed subparagraph (B)(ii) would require the owner or operator of the stationary source of NO_x in Wise County subject to the requirements of $\S117.405$ to demonstrate compliance with all other requirements of proposed Chapter 117, Subchapter B, Division 4 no later than July 20, 2021, which would also be the deadline for submittal of the final control plan required by existing $\S117.452$.

The commission does not propose any changes to existing §117.9030(a)(2), which specifies that the owner or operator of any stationary source of NO_x that becomes

subject to the requirements of proposed Chapter 117, Subchapter B, Division 4 on or after July 20, 2021, shall comply with the requirements of Chapter 117, Subchapter B, Division 4 as soon as practicable, but no later than 60 days after becoming subject. For example, new units placed into service after July 20, 2021 would be required to comply within 60 days after startup of the unit. Existing units previously exempt from the rule but no longer qualifying for that exemption after July 20, 2021 would be required to comply with the proposed rule no later than 60 days after the unit no longer qualifies for the exemption.

The commission proposes to remove existing §117.9030(a)(3) since it is no longer necessary to include language concerning the removal of rule compliance requirements in Wise County upon *Texas Register* publication that Wise County's nonattainment designation for the 2008 eight-hour ozone NAAQS is no longer legally effective. The commission has no intent at this time to publish a notice in the *Texas Register* that Wise County is no longer designated nonattainment for the 2008 eight-hour ozone NAAQS. This language was added during a previous rulemaking (Rule Project Number 2013-049-117-AI) due to litigation on this issue, which has since ended.

Fiscal Note: Costs to State and Local Government

Jené Bearse, Analyst in the Budget and Planning Division, determined that for the first five-year period the proposed rules are in effect, no fiscal implications are anticipated for the agency or for other units of state or local government as a result of Texas Commission on Environmental Quality Chapter 117 - Control of Air Pollution from Nitrogen Compounds Rule Project No. 2019-074-117-AI

administration or enforcement of the proposed rules.

The rulemaking is proposed in order to comply with the requirements of the FCAA under $\S172(c)(1)$ and $\S182(f)$. The FCAA requires the state to submit a SIP revision that implements RACT for all major sources of NO_x .

Public Benefits and Costs

Ms. Bearse also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from the changes seen in the proposed rulemaking will be in compliance with the federal and state law, continued protection of the environment and public health, and fair administration of the NO_x emission standards for the DFW area. It is estimated that the proposed rules would reduce the amount of NO_x in the DFW area by 93.4 tpy or 0.26 tons per day based on reported annual operating hours.

Individuals and the public should not experience any fiscal implications from the implementation of the proposed rules. The proposed rules may result in fiscal implications for a limited number of businesses in the oil, gas, and liquid hydrocarbons industry in Wise County. The agency estimates that the rules will affect five businesses that operate 13 oil and gas facilities or sites. Within these 13 sites, the agency estimates there are 45 emission sources. The agency estimates that one source is an industrial process heater and the other 44 are industrial gas-fired engines.

The proposed rulemaking would require affected businesses to comply with the emission standards, conduct initial emissions testing or continuous emissions monitoring to demonstrate compliance, install and operate a totalizing fuel flow meter, perform quarterly and periodic annual emissions compliance testing on engines, submit compliance reports to the TCEQ, and maintain the appropriate records demonstrating compliance with the proposed rules, including but not limited to fuel usage, produced emissions, emissions-related control system maintenance, and emissions performance testing.

The proposed rules would require some owners or operators of major ICI sources of NO_x in the DFW area to control emissions. There would be fiscal implications for some industrial entities required to install controls or modify operations. Fiscal implications could vary depending on the type of emission source, the size of the source, and the type of emission control technology chosen by the affected business.

For the first year, the fiscal impact is due to capital costs, associated with equipment purchase, labor, and installation; and annual costs, associated with emissions compliance testing and equipment maintenance, estimated at \$524,340. Annual impacts after the first year are associated with emissions compliance testing and equipment maintenance, with a fiscal amount of \$559,000 for years two, three, four, and five combined. Combined total capital and total annual costs for the first five

years for all affected ICI units to comply with the proposed requirements of Chapter 117, Subchapter B, Division 4 are estimated at \$1,083,340, with total capital estimated to be \$272,340 and total annual estimated to be \$811,000. The cost-effectiveness for the proposed emission reductions for the first five years the proposed rules are in effect is estimated at \$2,319 per ton of NO_x reduced.

All 45 affected emission sources or units would be required to install and operate a totalizing fuel flow meter to monitor fuel usage to demonstrate compliance with the proposed rules and monitor gas and liquid fuel usage. The estimated cost to purchase and install a totalizing fuel flow meter is \$2,500 per meter. The agency estimates that there are not any annual operating and maintenance costs for a totalizing fuel flow meter. Fuel metering costs, therefore, have a combined total capital cost of \$112,500 for all 45 affected ICI units located at NO_x major sources in Wise County. Compliance emissions stack testing is estimated at \$5,000 per test. All engines would be required to conduct initial and periodic compliance emissions tests as well as quarterly tests, with quarterly emissions testing using a portable NO_x analyzer estimated at \$125 per test.

Three of the total 12 rich-burn engines would be required to install non-selective catalytic reduction (NSCR) with an air-fuel ratio (AFR) controller to reduce NO_x emissions to the NO_x standard set for rich-burn engines in the current rule. One rich burn engine would be required to install additional catalyst elements to an existing

NSCR. None of the total 32 lean-burn engines would require combustion modifications to meet the current NO_x standards for lean-burn engines. Of the total 11 process heaters, one would be subject to the current NO_x emission specification for process heaters, and this one heater may require installation and operation of dry low- NO_x (DLN) combustors along with a single burner test to verify burner design and operation to meet the current rule standard. Combined total capital costs due to retrofit for all affected ICI units to meet current rule standards are estimated at \$159,840.

Capital costs for a new NSCR system are approximately \$30 per horsepower (hp). For an existing system, the cost is approximately \$10/hp to add catalyst elements to further reduce NO_x emissions. Three units are anticipated to require new NSCR, and one is anticipated to require additional catalyst elements to meet the current NO_x emission specification for rich-burn gas-fired engines. The remaining eight units are expected to meet the current emission standard without additional controls or engine modifications. Annual costs for operation and maintenance for new systems are approximately \$3,000 per year per engine and assumed to be half of that for existing NSCR systems requiring only additional catalyst elements. Capital costs associated with new NSCR and secondary catalyst retrofits for four units are estimated to be \$59,840 with annual operating and maintenance costs for new systems and additional catalysts of \$10,500. For the first five years the proposed rules are in effect, these annual costs are estimated at \$52,500. No capital costs due to retrofits or combustion modifications are expected for the 32 lean-burn gas-fired engines for these units to

meet the current NO_x emission specifications for lean-burn engines. Therefore, no annual costs are expected in association with emissions control systems for these 32 units.

Capital costs for totalizing fuel flow meters, expected to be required for all 12 richburn and 32 lean-burn gas-fired engines that become newly subject to the proposed requirements of Chapter 117, Subchapter B, Division 4 and are not exempt, are estimated to total \$110,000. For all 44 engines, initial and periodic compliance emissions tests are required along with three quarterly checks. These annual compliance costs are estimated to be \$236,500 in the first year and every other year. Quarterly checks, required for years in which periodic stack testing is not required, are estimated to cost \$22,000 per year for all 44 engines. All capital due to retrofit, operation and maintenance, emissions testing, and fuel meter costs for these 44 units are estimated to total \$416,840 for the first year; \$247,000 for years three and five; and \$32,500 for years two and four. These same costs are estimated to total \$975,840 for the first five years the proposed rules are in effect for all 44 gas-fired engines. Application of NSCR on rich-burn gas-fired engines is estimated to achieve a reduction in NO_x emissions of 0.25 tons per day. No reductions in NO_x emissions are anticipated from these activities on lean-burn gas-fired engines.

To meet the current NO_x standard for gas-fired process heaters, one unit may need to install and operate DLN combustors, which have a capital cost of approximately \$7,500

per burner, per heater for a conventional-style burner. A single burner test is usually required to prove the design is efficient on the unit, and the estimates for this single test may total \$25,000 per heater. A reasonable assumption for the number of burners to meet proposed emission levels is 10 burners per heater for installation; although fewer burners may be necessary. Capital costs associated with the retrofit for the one non-exempt unit are estimated at \$75,000, with an additional capital cost of approximately \$25,000 for the burner tests. Annual operating and maintenance costs associated with the DLN combustors are expected to range from minimal to zero considering the type of fuel combusted and size of the heater. Totalizing fuel metering costs for the one unit are estimated to be \$2,500. Annual costs associated with initial compliance emissions testing are estimated at \$5,000 for the one process heater newly subject to the current emission specification. Combined capital costs are estimated at \$102,500, and total annual costs are estimated at \$5,000. All capital due to retrofit, operation and maintenance, emissions testing, and fuel meter costs for the one unit are estimated to total \$107,500. These burner retrofits are anticipated to achieve NO_x emission reductions of approximately 0.003 tons per day.

In summary, the agency estimated the following example costs (including the capital expense of a retrofit) to implement RACT over a five-year period: \$524,340 in Year 1; \$32,500 in Year 2; \$247,000 in Year 3; \$32,500 in Year 4; and \$247,000 in Year 5. These example costs reflect that all capital costs occur in the first year of the five-year period with any annual cost due to emissions performance testing also occurring in

the first year of the five-year period. The variability of example costs per year over the five-year period is mainly due to the initial and periodic compliance emissions tests along with the quarterly emissions checks associated with stationary internal combustion engines required by the rules in Chapter 117.

Local Employment Impact Statement

The commission reviewed this proposed rulemaking and determined that a Local Employment Impact Statement is not required because the proposed rulemaking does not adversely affect a local economy in a material way for the first five years that the proposed rulemaking is in effect.

Rural Communities Impact Assessment

The commission reviewed this proposed rulemaking and determined that the proposed rulemaking does not adversely affect rural communities in a material way for the first five years that the proposed rulemaking is in effect.

Small Business and Micro-Business Assessment

After an analysis of the business information available to the public and in the agency's records, the agency estimates that two of the businesses may be categorized as small businesses with fewer than 100 employees or less than \$6 million in annual gross receipts. One of those businesses may also be categorized as a micro-business.

These two businesses operate sites with emission sources that are already subject to state or federal regulations concerning air emission compliance, such as air permitting, emissions and parametric monitoring, recordkeeping, and reporting requirements. These two businesses may experience costs over the next five years to implement RACT for all major sources of NO_x .

Small Business Regulatory Flexibility Analysis

As required by Texas Government Code, §2006.002, the commission conducted an Economic Impact Statement and Regulatory Flexibility Analysis.

The commission estimates that two businesses with emission sources in Wise County may be categorized as small businesses and may experience a negative economic impact due to implementation of the proposed rules. One of the businesses may also be categorized as a micro-business. In accordance with Chapter 117, Subchapter B, Division 4, the businesses will need to comply with emission standards, conduct initial emissions testing or continuous emissions monitoring to demonstrate compliance, install and operate a totalizing fuel flow meter, perform quarterly and periodic annual emissions compliance testing on engines, submit compliance reports, and maintain records. None of the engines owned by either business will require a retrofit, which greatly reduces the expense. The commission estimates these expenses for the two businesses.

Figure: 30 TAC Chapter 117--Preamble

	Expenses	Year 1	Year 2	Year 3	Year 4	Year 5
Small Business #1	Fuel meter, compliance	(\$47,250)	(\$3,000)	(\$32,500)	(\$3,000)	(\$32,500)
	testing & monitoring, and					
	maintenance					
Small Business #2	Fuel meter, compliance	(\$7,875)	(\$500)	(\$5,375)	(\$500)	(\$5,375)
(Micro-business)	testing & monitoring, and					
	maintenance					

Under Texas Government Code, §2006.002(c-1), the commission is required to consider alternative regulatory methods only if the alternative methods would be consistent with the health, safety, and environmental welfare of the state. The commission developed this proposed rulemaking to comply with the FCAA and state law. The FCAA requires states to submit plans to demonstrate attainment of the NAAQS for ozone nonattainment areas designated with a classification of moderate or higher. The DFW area is currently classified as a serious nonattainment area for the 2008 eight-hour ozone NAAQS of 0.075 ppm with a July 20, 2021 attainment deadline. With reclassification of the DFW area to serious nonattainment, the major source emissions threshold for Wise County is the PTE of 50 tpy of NO_x emissions.

Because a variance from the federal standard would not be consistent with the health, safety, and environmental and economic welfare of the state, no alternative regulatory methods were considered or recommended as part of this analysis.

Government Growth Impact Statement

The commission prepared a Government Growth Impact Statement assessment for this

proposed rulemaking. The proposed rulemaking does not create or eliminate a government program and will not require an increase or decrease in future legislative appropriations to the agency. The proposed rulemaking does not require the creation of new employee positions, eliminate current employee positions, or require an increase or decrease in fees paid to the agency. The proposed rulemaking does expand an existing regulation in Wise County and may increase the number of individuals subject to its applicability. The agency estimates that five additional businesses will be subject to the rule. During the first five years, the proposed rulemaking should not impact positively or negatively the state's economy.

Draft Regulatory Impact Analysis Determination

The commission reviewed the amendments in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the amendments do not meet the definition of a "Major environmental rule" as defined in that statute, and in addition, if they did meet the definition, would not be subject to the requirement to prepare a regulatory impact analysis.

A "Major environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The specific intent of the proposed amendments is to

revise Chapter 117 to implement RACT for all major sources of NO_x in the DFW area as required by FCAA, §172(c)(1) and §182(f). The proposed amendments would implement RACT in Wise County to reflect the change in the major source threshold for Wise County to serious for the 2008 eight-hour ozone NAAQS. The proposed amendments would require owners or operators of affected sources to comply with the emission standards, conduct initial emissions testing or continuous emissions monitoring to demonstrate compliance, install and operate a totalizing fuel flow meter, perform quarterly and periodic annual emissions compliance testing on stationary engines, submit compliance reports to the TCEQ, and maintain the appropriate records demonstrating compliance with the proposed rules, including but not limited to fuel usage, produced emissions, emissions-related control system maintenance, and emissions performance testing. The proposed amendments also update allowed

As discussed in the Fiscal Note: Costs to State and Local Government section of this preamble, the proposed amendments are not anticipated to add any significant additional costs to affected individuals or businesses beyond what is already required to comply with these federal standards on the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

emission test methods for engines.

Additionally, these amendments do not meet any of the four applicability criteria for

requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. These proposed amendments would implement NO_x RACT in Wise County to reflect the change in the major source threshold for Wise County, as required by the EPA's change in designation of the DFW 2008 eight-hour ozone nonattainment area to serious nonattainment, and update allowed emission test methods for engines.

The FCAA requires states to submit plans to demonstrate attainment of the NAAQS for ozone nonattainment areas designated with a classification of moderate or higher. The DFW 2008 eight-hour ozone nonattainment area, consisting of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, is currently classified as a serious nonattainment area for the 2008 eight-hour ozone NAAQS of 0.075 ppm with a July 20, 2021 attainment date. The EPA signed the final reclassification notice to reclassify the DFW area from moderate to serious on August 7, 2019. With the final reclassification to serious nonattainment, the state is required

to submit a SIP revision to fulfill the NO_x RACT requirements mandated by FCAA, $\S172(c)(1)$ and $\S182(f)$.

Depending on the classification of an area designated nonattainment for the ozone standard, the major source threshold that determines what sources are subject to RACT requirements varies. Under the 1997 eight-hour ozone NAAQS, the DFW area consisted of nine counties (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties) and was classified as a serious nonattainment area. The EPA's implementation rule for the 2008 eight-hour ozone NAAQS requires retaining the most stringent major source emission threshold for sources in an area to prevent backsliding (80 FR 12264). For this reason, the major source emission threshold remains at the serious classification level, which is the PTE of 50 tpy of NO_x. The major source threshold for Wise County, which was not part of the DFW 1997 eight-hour ozone NAAQS nonattainment area but was included as part of the DFW 2008 eight-hour ozone NAAQS nonattainment area, is based on a classification of moderate under the 2008 standard, or the PTE of 100 tpy of NO_x. With the reclassification of DFW as a serious nonattainment area under the 2008 eight-hour ozone NAAQS, the major source emission threshold for Wise County is the PTE of 50 tpy of NO_x emissions. This proposed rulemaking would implement RACT in Wise County to reflect this change in the major source threshold for Wise County.

The proposed amendments would revise Chapter 117 to implement NO_x RACT in Wise

County lowering the major source threshold to 50 tpy of NO_x and requiring owners or operators of affected sources to comply with the emission standards, conduct initial emissions testing or continuous emissions monitoring to demonstrate compliance, install and operate a totalizing fuel flow meter, perform quarterly and periodic annual emissions compliance testing on stationary engines, submit compliance reports to the TCEQ, and maintain the appropriate records demonstrating compliance with the proposed rules, including but not limited to fuel usage, produced emissions, emissions-related control system maintenance, and emissions performance testing. The proposed amendments also update allowed emission test methods for engines.

The proposed rulemaking implements requirements of 42 United State Code (USC) §7410, which requires states to adopt a SIP that provides for the implementation, maintenance, and enforcement of the NAAQS in each air quality control region of the state. While 42 USC §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, the SIP must include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter (42 USC Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the

public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC §7410. States are not free to ignore the requirements of 42 USC §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. The proposed amendments would revise Chapter 117 to implement NO_X RACT in Wise County to reflect the change in the major source threshold for Wise County to 50 tpy of NO_X and update allowed emission test methods for engines.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th Texas Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 concluding that "based on an assessment of rules adopted by the agency in the past, it is not anticipated that SB 633 will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules

that would require assessment under the provisions of SB 633 was not large. This conclusion was based, in part, on the criteria set forth in SB 633 that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, and to meet the requirements of 42 USC §7410, the commission routinely proposes and adopts rules into the SIP. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every rule adopted into the SIP would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the rules included in the SIP will have a broad impact, the impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted

for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); Bullock v. Marathon Oil Co., 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ); Cf. Humble Oil & Refining Co. v. Calvert, 414 S.W.2d 172 (Tex. 1967); Dudney v. State Farm Mut. Auto Ins. Co., 9 S.W.3d 884, 893 (Tex. App. Austin 2000); Southwestern Life Ins. Co. v. Montemayor, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and Coastal Indust. Water Auth. v. Trinity Portland Cement Div., 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The

legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the proposed amendments is to revise Chapter 117 to implement NO_x RACT in Wise County to reflect the change in the major source threshold to 50 tpy of NO_x for Wise County and update allowed emission test methods for engines. The proposed rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this proposed rulemaking. Therefore, this proposed rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, \$2001.0225(b), because it does not meet the definition of a "Major environmental rule"; it also does not meet any of the four applicability criteria for a major environmental rule.

Written comments on the Draft Regulatory Impact Analysis Determination may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Takings Impact Assessment

The commission evaluated the proposed rulemaking and performed an assessment of whether Texas Government Code, Chapter 2007, is applicable. The specific purpose of

the proposed amendments is to implement RACT for all NO_x emission sources in the DFW 2008 eight-hour ozone NAAQS nonattainment area, as required by FCAA, $\S172(c)(1)$ and $\S182(f)$. The proposed rulemaking would revise Chapter 117 to implement NO_x RACT in Wise County to reflect the change in the major source threshold to 50 tpy of NO_x for Wise County and update allowed emission test methods for engines. Texas Government Code, $\S2007.003(b)(4)$, provides that Texas Government Code, Chapter 2007 does not apply to this proposed rulemaking because it is an action reasonably taken to fulfill an obligation mandated by federal law.

In addition, the commission's assessment indicates that Texas Government Code, Chapter 2007 does not apply to these proposed rules because this is an action that is taken in response to a real and substantial threat to public health and safety; that is designed to significantly advance the health and safety purpose; and that does not impose a greater burden than is necessary to achieve the health and safety purpose. Thus, this action is exempt under Texas Government Code, $\S 2007.003(b)(13)$. The proposed amendments fulfill the FCAA requirement to implement RACT in nonattainment areas. These revisions will result in NO_x emission reductions in ozone nonattainment areas that may contribute to the timely attainment of the 2008 eighthour ozone NAAQS and reduce public exposure to NO_x . Consequently, the proposed rulemaking meets the exemption criteria in Texas Government Code, $\S 2007.003(b)(4)$ and (13). For these reasons, Texas Government Code, Chapter 2007 does not apply to this proposed rulemaking.

Consistency with the Coastal Management Program

The commission reviewed the proposed rulemaking and found the proposal is a rulemaking identified in the Coastal Coordination Act implementation rules, 31 TAC §505.11(b)(2), relating to rules subject to the Coastal Management Program, and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the rulemaking will not affect any coastal natural resource areas because the rules only affect counties outside the CMP area and is, therefore, consistent with CMP goals and policies.

Written comments on the consistency of this rulemaking may be submitted to the contact person at the address listed under the Submittal of Comments section of this preamble.

Effect on Sites Subject to the Federal Operating Permits Program

Chapter 117 is an applicable requirement under 30 TAC Chapter 122, Federal

Operating Permits Program. If the proposed revisions to Chapter 117 are adopted,

owners or operators subject to the federal operating permit program must, consistent

with the revision process in Chapter 122, upon the effective date of the rulemaking, revise their operating permit to include the new Chapter 117 requirements.

Announcement of Hearing

The commission will hold a public hearing on this proposal in Houston on October 14, 2019, at 2:00 p.m. in the auditorium of the Texas Department of Transportation located at 7600 Washington Avenue; and in Arlington on October 17, 2019 at 2:00 p.m. in the Arlington City Council Chambers located at 101 Abram Street. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon in order of registration. Open discussion will not be permitted during the hearing; however, commission staff members will be available to discuss the proposal 30 minutes prior to the hearing.

Persons who have special communication or other accommodation needs who are planning to attend the hearing should contact Sandy Wong, Office of Legal Services at (512) 239-1802 or 1-800-RELAY-TX (TDD). Requests should be made as far in advance as possible.

Submittal of Comments

Written comments may be submitted to Ms. Kris Hogan, MC 205, Office of Legal Services, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087, or faxed to (512) 239-4808. Electronic comments may be submitted at:

https://www6.tceq.texas.gov/rules/ecomments/. File size restrictions may apply to comments being submitted via the eComments system. All comments should reference Rule Project Number 2019-074-117-AI. The comment period closes on October 28, 2019. Copies of the proposed rulemaking can be obtained from the commission's website at https://www.tceq.texas.gov/rules/propose_adopt.html. For further information, please contact Javier Galván, Air Quality Planning Section, at (512) 239-1492.

SUBCHAPTER A: DEFINITIONS

§117.10

Statutory Authority

The amended section is proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended section is also proposed under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to

determine compliance with its rules. The amended section is also proposed under Federal Clean Air Act (FCAA), 42 United States Code (USC) §§7401, *et seq.*, which requires states to submit State Implementation Plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021; and FCAA, 42 USC §§7401, *et seq.*

§117.10. Definitions.

Unless specifically defined in the Texas Clean Air Act or Chapter 101 of this title (relating to General Air Quality Rules), the terms in this chapter have the meanings commonly used in the field of air pollution control. Additionally, the following meanings apply, unless the context clearly indicates otherwise. Additional definitions for terms used in this chapter are found in §3.2 and §101.1 of this title (relating to Definitions).

(1) Annual capacity factor--The total annual fuel consumed by a unit divided by the fuel that could be consumed by the unit if operated at its maximum rated capacity for 8,760 hours per year.

- (2) Applicable ozone nonattainment area--The following areas, as designated under the 1990 Federal Clean Air Act Amendments.
- (A) Beaumont-Port Arthur ozone nonattainment area--An area consisting of Hardin, Jefferson, and Orange Counties.
- (B) Dallas-Fort Worth eight-hour ozone nonattainment area--An area consisting of:
- (i) for the purposes of Subchapter D of this chapter (relating to Combustion Control at Minor Sources in Ozone Nonattainment Areas), Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties; or
- (ii) for all other divisions of this chapter, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties.
- (C) Houston-Galveston-Brazoria ozone nonattainment area--An area consisting of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.
- (3) Auxiliary steam boiler--Any combustion equipment within an electric power generating system, as defined in this section, that is used to produce steam for

purposes other than generating electricity. An auxiliary steam boiler produces steam as a replacement for steam produced by another piece of equipment that is not operating due to planned or unplanned maintenance.

- (4) Average activity level for fuel oil firing--The product of an electric utility unit's maximum rated capacity for fuel oil firing and the average annual capacity factor for fuel oil firing for the period from January 1, 1990, to December 31, 1993.
- (5) Block one-hour average--An hourly average of data, collected starting at the beginning of each clock hour of the day and continuing until the start of the next clock hour.
- (6) Boiler--Any combustion equipment fired with solid, liquid, and/or gaseous fuel used to produce steam or to heat water.
 - (7) Btu--British thermal unit.
- (8) Chemical processing gas turbine--A gas turbine that vents its exhaust gases into the operating stream of a chemical process.

- (9) Continuous emissions monitoring system (CEMS)--The total equipment necessary for the continuous determination and recordkeeping of process gas concentrations and emission rates in units of the applicable emission limitation.
- (10) Daily--A calendar day starting at midnight and continuing until midnight the following day.
- (11) Diesel engine--A compression-ignited two- or four-stroke engine that liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.
- (12) Duct burner--A unit that combusts fuel and that is placed in the exhaust duct from another unit (such as a stationary gas turbine, stationary internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases.
- (13) Electric generating facility (EGF)--A unit that generates electric energy for compensation and is owned or operated by a person doing business in this state, including a municipal corporation, electric cooperative, or river authority.
- (14) Electric power generating system--One electric power generating system consists of either:

(A) for the purposes of Subchapter C, Divisions 1 and 4 of this chapter (relating to Beaumont-Port Arthur Ozone Nonattainment Area Utility Electric Generation Sources; and Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Utility Electric Generation Sources), all boilers, auxiliary steam boilers, and stationary gas turbines (including duct burners used in turbine exhaust ducts) at electric generating facility (EGF) accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, municipality, river authority, public utility, independent power producer, or a Public Utility Commission of Texas regulated utility, or any of its successors; and are entirely located in one of the following ozone nonattainment areas:

- (i) Beaumont-Port Arthur; or
- (ii) Dallas-Fort Worth eight-hour;

(B) for the purposes of Subchapter C, Division 3 of this chapter (relating to Houston-Galveston-Brazoria Ozone Nonattainment Area Utility Electric Generation Sources), all boilers, auxiliary steam boilers, and stationary gas turbines (including duct burners used in turbine exhaust ducts) at EGF accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, municipality, river authority, public utility, or a Public Utility Commission of Texas

regulated utility, or any of its successors; and are entirely located in the Houston-Galveston-Brazoria ozone nonattainment area;

(C) for the purposes of Subchapter B, Division 3 of this chapter (relating to Houston-Galveston-Brazoria Ozone Nonattainment Area Major Sources), all units in the Houston-Galveston-Brazoria ozone nonattainment area that generate electricity but do not meet the conditions specified in subparagraph (B) of this paragraph, including, but not limited to, cogeneration units and units owned by independent power producers; or

(D) for the purposes of Subchapter E, Division 1 of this chapter (relating to Utility Electric Generation in East and Central Texas), all boilers, auxiliary steam boilers, and stationary gas turbines at EGF accounts that generate electric energy for compensation; are owned or operated by an electric cooperative, independent power producer, municipality, river authority, or public utility, or any of its successors; and are located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Parker, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.

(15) Emergency situation--As follows.

(A) An emergency situation is any of the following:

(i) an unforeseen electrical power failure from the serving electric power generating system;

(ii) the period of time that an Electric Reliability Council of Texas, Inc. (ERCOT)-issued emergency notice or energy emergency alert (EEA) (as defined in *ERCOT Nodal Protocols, Section 2: Definitions and Acronyms* (August 13, 2014) and issued as specified in *ERCOT Nodal Protocols, Section 6: Adjustment Period and Real-Time Operations* (August 13, 2014)) is applicable to the serving electric power generating system. The emergency situation is considered to end upon expiration of the emergency notice or EEA issued by ERCOT;

(iii) an unforeseen failure of on-site electrical transmission equipment (e.g., a transformer);

- (iv) an unforeseen failure of natural gas service;
- (v) an unforeseen flood or fire, or a life-threatening

situation;

(vi) operation of emergency generators for Federal Aviation Administration licensed airports, military airports, or manned space flight control centers for the purposes of providing power in anticipation of a power failure due to severe storm activity; or

(vii) operation of an emergency generator as part of ERCOT's emergency response service (as defined *in ERCOT Nodal Protocols, Section 2: Definitions and Acronyms* (August 13, 2014)) if the operation is in direct response to an instruction by ERCOT during the period of an ERCOT EEA as specified in clause (ii) of this subparagraph.

- (B) An emergency situation does not include:
- (i) operation for training purposes or other foreseeable events; or
- (ii) operation for purposes of supplying power for distribution to the electric grid, except as specified in subparagraph (A)(vii) of this paragraph.
- (16) Functionally identical replacement--A unit that performs the same function as the existing unit that it replaces, with the condition that the unit replaced

must be physically removed or rendered permanently inoperable before the unit replacing it is placed into service.

- (17) Heat input--The chemical heat released due to fuel combustion in a unit, using the higher heating value of the fuel. This does not include the sensible heat of the incoming combustion air. In the case of carbon monoxide (CO) boilers, the heat input includes the enthalpy of all regenerator off-gases and the heat of combustion of the incoming CO and of the auxiliary fuel. The enthalpy change of the fluid catalytic cracking unit regenerator off-gases refers to the total heat content of the gas at the temperature it enters the CO boiler, referring to the heat content at 60 degrees Fahrenheit, as being zero.
- (18) Heat treat furnace--A furnace that is used in the manufacturing, casting, or forging of metal to heat the metal so as to produce specific physical properties in that metal.
- (19) High heat release rate--A ratio of boiler design heat input to firebox volume (as bounded by the front firebox wall where the burner is located, the firebox side waterwall, and extending to the level just below or in front of the first row of convection pass tubes) greater than or equal to 70,000 British thermal units per hour per cubic foot.

- (20) Horsepower rating--The engine manufacturer's maximum continuous load rating at the lesser of the engine or driven equipment's maximum published continuous speed.
 - (21) Incinerator--As follows.
- (A) For the purposes of this chapter, the term "incinerator" includes both of the following:
- (i) a control device that combusts or oxidizes gases or vapors (e.g., thermal oxidizer, catalytic oxidizer, vapor combustor); and
- (ii) an incinerator as defined in §101.1 of this title (relating to Definitions).
- (B) The term "incinerator" does not apply to boilers or process heaters as defined in this section, or to flares as defined in §101.1 of this title.
- (22) Industrial boiler--Any combustion equipment, not including utility or auxiliary steam boilers as defined in this section, fired with liquid, solid, or gaseous fuel, that is used to produce steam or to heat water.

- (23) International Standards Organization (ISO) conditions--ISO standard conditions of 59 degrees Fahrenheit, 1.0 atmosphere, and 60% relative humidity.
- (24) Large utility system--All boilers, auxiliary steam boilers, and stationary gas turbines that are located in the Dallas-Fort Worth eight-hour ozone nonattainment area, and were part of one electric power generating system on January 1, 2000, that had a combined electric generating capacity equal to or greater than 500 megawatts.
- (25) Lean-burn engine--A spark-ignited or compression-ignited, Otto cycle, diesel cycle, or two-stroke engine that is not capable of being operated with an exhaust stream oxygen concentration equal to or less than 0.5% by volume, as originally designed by the manufacturer.
- (26) Low annual capacity factor boiler, process heater, or gas turbine supplemental waste heat recovery unit--An industrial, commercial, or institutional boiler; process heater; or gas turbine supplemental waste heat recovery unit with maximum rated capacity:
- (A) greater than or equal to 40 million British thermal units per hour (MMBtu/hr), but less than 100 MMBtu/hr and an annual heat input less than or

equal to 2.8 (10¹¹) British thermal units per year (Btu/yr), based on a rolling 12-month average; or

- (B) greater than or equal to $100 \, \text{MMBtu/hr}$ and an annual heat input less than or equal to $2.2 \, (10^{11}) \, \text{Btu/yr}$, based on a rolling 12-month average.
- (27) Low annual capacity factor stationary gas turbine or stationary internal combustion engine--A stationary gas turbine or stationary internal combustion engine that is demonstrated to operate less than 850 hours per year, based on a rolling 12-month average.
- (28) Low heat release rate--A ratio of boiler design heat input to firebox volume less than 70,000 British thermal units per hour per cubic foot.
- (29) Major source--Any stationary source or group of sources located within a contiguous area and under common control that emits or has the potential to emit:
- (A) at least 50 tons per year (tpy) of nitrogen oxides (NO_x) and is located in the Beaumont-Port Arthur ozone nonattainment area;

- (B) at least 50 tpy of NO_x and is located in the Dallas-Fort Worth eight-hour ozone nonattainment area [Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County];
 - [(C) at least 100 tpy of NO_x and is located in Wise County;]
- $\underline{\text{(C)}} \text{ [(D)] at least 25 tpy of NO}_x \text{ and is located in the Houston-}\\$ Galveston-Brazoria ozone nonattainment area; or
- (D) [(E)] the amount specified in the major source definition contained in the Prevention of Significant Deterioration of Air Quality regulations promulgated by the United States Environmental Protection Agency in 40 Code of Federal Regulations §52.21 as amended June 3, 1993 (effective June 3, 1994), and is located in Atascosa, Bastrop, Bexar, Brazos, Calhoun, Cherokee, Comal, Fannin, Fayette, Freestone, Goliad, Gregg, Grimes, Harrison, Hays, Henderson, Hood, Hunt, Lamar, Limestone, Marion, McLennan, Milam, Morris, Nueces, Red River, Robertson, Rusk, Titus, Travis, Victoria, or Wharton County.
- (30) Maximum rated capacity--The maximum design heat input, expressed in million British thermal units per hour, unless:

- (A) the unit is a boiler, utility boiler, or process heater operated above the maximum design heat input (as averaged over any one-hour period), in which case the maximum operated hourly rate must be used as the maximum rated capacity; or
- (B) the unit is limited by operating restriction or permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity; or
- (C) the unit is a stationary gas turbine, in which case the manufacturer's rated heat consumption at the International Standards Organization (ISO) conditions must be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity; or
- (D) the unit is a stationary, internal combustion engine, in which case the manufacturer's rated heat consumption at Diesel Equipment Manufacturer's Association or ISO conditions must be used as the maximum rated capacity, unless limited by permit condition to a lesser heat input, in which case the limiting condition must be used as the maximum rated capacity.

- (31) Megawatt (MW) rating--The continuous MW output rating or mechanical equivalent by a gas turbine manufacturer at International Standards Organization conditions, without consideration to the increase in gas turbine shaft output and/or the decrease in gas turbine fuel consumption by the addition of energy recovered from exhaust heat.
 - (32) Nitric acid--Nitric acid that is 30% to 100% in strength.
- (33) Nitric acid production unit--Any source producing nitric acid by either the pressure or atmospheric pressure process.
- (34) Nitrogen oxides (NO_x)--The sum of the nitric oxide and nitrogen dioxide in the flue gas or emission point, collectively expressed as nitrogen dioxide.
- (35) Parts per million by volume (ppmv)--All ppmv emission specifications specified in this chapter are referenced on a dry basis. When required to adjust pollutant concentrations to a specified oxygen (O_2) correction basis, the following equation must be used.

Figure: 30 TAC §117.10(35) (No change to the figure as it currently exists in TAC.)

Cadj = Cmeas
$$\times \frac{(20.9\% - \%O_2 \text{rule})}{(20.9\% - \%O_2 \text{meas})}$$

Where:

Cadj = pollutant concentration adjusted to percent O₂, dry basis, specified in applicable rule, in units of applicable standard (e.g., parts per million by volume);

Cmeas = pollutant concentration measured on a dry basis, in units of applicable standard;

 $20.9\% = O_2$ concentration in air, percent;

 $%O_2$ rule = O_2 basis for adjustment specified in applicable rule (e.g., 3.0% for boilers and process heaters) on a dry basis, percent; and

 $%O_2$ meas = O_2 concentration measured simultaneous with pollutant concentration, percent.

- (36) Peaking gas turbine or engine--A stationary gas turbine or engine used intermittently to produce energy on a demand basis.
- (37) Plant-wide emission rate--The ratio of the total actual nitrogen oxides mass emissions rate discharged into the atmosphere from affected units at a major source when firing at their maximum rated capacity to the total maximum rated capacities for those units.

- (38) Plant-wide emission specification--The ratio of the total allowable nitrogen oxides mass emissions rate dischargeable into the atmosphere from affected units at a major source when firing at their maximum rated capacity to the total maximum rated capacities for those units.
- (39) Predictive emissions monitoring system (PEMS)--The total equipment necessary for the continuous determination and recordkeeping of process gas concentrations and emission rates using process or control device operating parameter measurements and a conversion equation or computer program to produce results in units of the applicable emission limitation.
- (40) Process heater--Any combustion equipment fired with liquid and/or gaseous fuel that is used to transfer heat from combustion gases to a process fluid, superheated steam, or water for the purpose of heating the process fluid or causing a chemical reaction. The term "process heater" does not apply to any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment, or to boilers as defined in this section.
- (41) Pyrolysis reactor--A unit that produces hydrocarbon products from the endothermic cracking of feedstocks such as ethane, propane, butane, and naphtha using combustion to provide indirect heating for the cracking process.

- (42) Reheat furnace--A furnace that is used in the manufacturing, casting, or forging of metal to raise the temperature of that metal in the course of processing to a temperature suitable for hot working or shaping.
- (43) Rich-burn engine--A spark-ignited, Otto cycle, four-stroke, naturally aspirated or turbocharged engine that is capable of being operated with an exhaust stream oxygen concentration equal to or less than 0.5% by volume, as originally designed by the manufacturer.
- (44) Small utility system--All boilers, auxiliary steam boilers, and stationary gas turbines that are located in the Dallas-Fort Worth eight-hour ozone nonattainment area, and were part of one electric power generating system on January 1, 2000, that had a combined electric generating capacity less than 500 megawatts.
- (45) Stationary gas turbine--Any gas turbine system that is gas and/or liquid fuel fired with or without power augmentation. This unit is either attached to a foundation or is portable equipment operated at a specific minor or major source for more than 90 days in any 12-month period. Two or more gas turbines powering one shaft must be treated as one unit.
- (46) Stationary internal combustion engine--A reciprocating engine that remains or will remain at a location (a single site at a building, structure, facility, or

engine that, by itself or in or on a piece of equipment, is portable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine being replaced is included in calculating the consecutive residence time period. An engine is considered stationary if it is removed from one location for a period and then returned to the same location in an attempt to circumvent the consecutive residence time requirement. Nonroad engines, as defined in 40 Code of Federal Regulations §89.2, are not considered stationary for the purposes of this chapter.

(47) System-wide emission rate--The ratio of the total actual nitrogen oxides mass emissions rate discharged into the atmosphere from affected units in an electric power generating system or portion thereof located within a single ozone nonattainment area when firing at their maximum rated capacity to the total maximum rated capacities for those units. For fuel oil firing, average activity levels must be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission rate.

(48) System-wide emission specification--The ratio of the total allowable nitrogen oxides mass emissions rate dischargeable into the atmosphere from affected

units in an electric power generating system or portion thereof located within a single ozone nonattainment area when firing at their maximum rated capacity to the total maximum rated capacities for those units. For fuel oil firing, average activity levels must be used in lieu of maximum rated capacities for the purpose of calculating the system-wide emission specification.

- (49) Thirty-day rolling average--An average, calculated for each day that fuel is combusted in a unit, of all the hourly emissions data for the preceding 30 days that fuel was combusted in the unit.
- (50) Twenty-four hour rolling average--An average, calculated for each hour that fuel is combusted (or acid is produced, for a nitric or adipic acid production unit), of all the hourly emissions data for the preceding 24 hours that fuel was combusted in the unit.

(51) Unit--A unit consists of either:

(A) for the purposes of §§117.105, 117.305, 117.405, 117.1005, and 117.1205 of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) and each requirement of this chapter associated with §§117.105, 117.305, 117.405, 117.1005, and 117.1205 of this title, any boiler, process

heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section;

(B) for the purposes of §§117.110, 117.310, 117.1010, and 117.1210 of this title (relating to Emission Specifications for Attainment Demonstration) and each requirement of this chapter associated with §§117.110, 117.310, 117.1010, and 117.1210 of this title, any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section, or any other stationary source of nitrogen oxides (NO_x) at a major source, as defined in this section;

(C) for the purposes of §117.2010 of this title (relating to Emission Specifications) and each requirement of this chapter associated with §117.2010 of this title, any boiler, process heater, stationary gas turbine (including any duct burner in the turbine exhaust duct), or stationary internal combustion engine, as defined in this section;

(D) for the purposes of §117.2110 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.2110 of this title, any stationary internal combustion engine, as defined in this section;

- (E) for the purposes of §117.3310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.3310 of this title, any stationary internal combustion engine, as defined in this section; or
- (F) for the purposes of §117.410 and §117.1310 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) and each requirement of this chapter associated with §117.410 and §117.1310 of this title, any boiler, process heater, stationary gas turbine, or stationary internal combustion engine, as defined in this section, or any other stationary source of NO_x at a major source, as defined in this section.
- (52) Utility boiler--Any combustion equipment owned or operated by an electric cooperative, municipality, river authority, public utility, or Public Utility Commission of Texas regulated utility, fired with solid, liquid, and/or gaseous fuel, used to produce steam for the purpose of generating electricity. Stationary gas turbines, including any associated duct burners and unfired waste heat boilers, are not considered to be utility boilers.
- (53) Wood--Wood, wood residue, bark, or any derivative fuel or residue thereof in any form, including, but not limited to, sawdust, sander dust, wood chips,

scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

SUBCHAPTER B: COMBUSTION CONTROL AT MAJOR INDUSTRIAL, COMMERIAL,
AND INSTITUTIONAL SOURCES IN OZONE NONATTAINMENT AREAS
DIVISION 4: DALLAS-FORT WORTH EIGHT-HOUR OZONE NONATTAINMENT AREA
MAJOR SOURCES
§117.400, §117.403

Statutory Authority

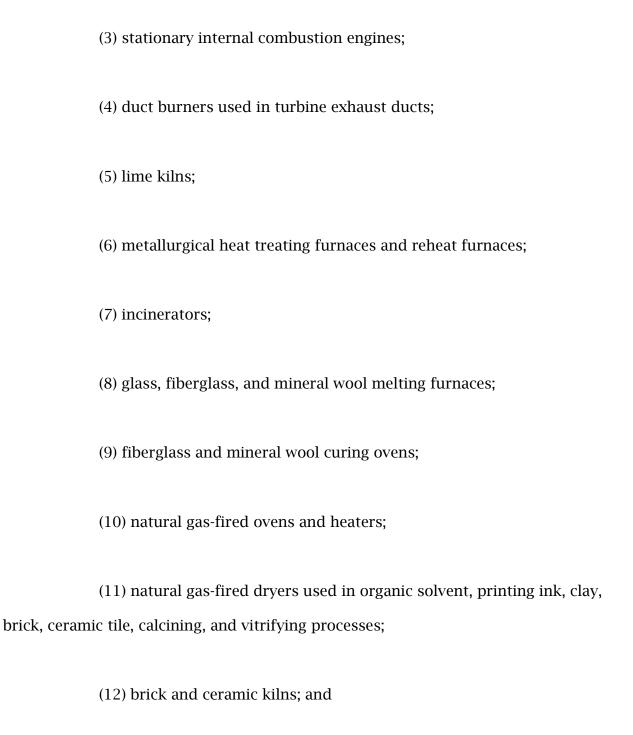
The amended sections are proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended sections are also proposed under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC,

§382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended section is also proposed under Federal Clean Air Act (FCAA), 42 United States Code (USC) §§7401, *et seq.*, which requires states to submit State Implementation Plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended sections implement THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021; and FCAA, 42 USC §§7401, *et seq.*

§117.400. Applicability.

- (a) The provisions of this division apply to the following units located at any major stationary source of nitrogen oxides (NO_x) located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County:
 - (1) industrial, commercial, or institutional boilers and process heaters;
 - (2) stationary gas turbines;



- (13) lead smelting reverberatory and blast (cupola) furnaces.
- (b) The provisions of this division apply to the following units located at any major stationary source of NO_x located in Wise County:
 - (1) industrial, commercial, or institutional process heaters;
 - (2) stationary gas turbines; [and]
 - (3) stationary internal combustion engines; and [.]
 - (4) incinerators.

§117.403. Exemptions.

(a) Units located in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, or Tarrant County exempted from the provisions of this division, except as specified in §§117.410(f), 117.440(i), 117.445(f)(4) and (9), 117.450, and 117.454 of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration; Continuous Demonstration of Compliance; Notification, Recordkeeping, and Reporting Requirements; Initial Control Plan Procedures; and Final Control Plan Procedures for Attainment Demonstration Emission Specifications), include the following:

- (1) industrial, commercial, or institutional boilers or process heaters with a maximum rated capacity equal to or less than:
- $\mbox{(A) 2.0 million British thermal units per hour (MMBtu/hr) for boilers; and}$
 - (B) 5.0 MMBtu/hr for process heaters;
- (2) heat treating furnaces and reheat furnaces with a maximum rated capacity less than 20 MMBtu/hr;
- (3) flares, incinerators with a maximum rated capacity less than 40 MMBtu/hr, pulping liquor recovery furnaces, sulfur recovery units, sulfuric acid regeneration units, molten sulfur oxidation furnaces, and sulfur plant reaction boilers;
- (4) dryers, heaters, or ovens with a maximum rated capacity of 5.0 MMBtu/hr or less;
- (5) any dryers, heaters, or ovens fired on fuels other than natural gas.

 This exemption does not apply to gas-fired curing ovens used for the production of mineral wool-type or textile-type fiberglass;

- (6) any glass, fiberglass, and mineral wool melting furnaces with a maximum rated capacity of 2.0 MMBtu/hr or less;
- (7) stationary gas turbines and stationary internal combustion engines, that are used as follows:
 - (A) in research and testing of the unit;
- (B) for purposes of performance verification and testing of the unit;
 - (C) solely to power other engines or gas turbines during startups;
- (D) exclusively in emergency situations, except that operation for testing or maintenance purposes of the gas turbine or engine is allowed for up to 100 hours per year, based on a rolling 12-month basis. Any new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after June 1, 2007, is ineligible for this exemption. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title (relating to General Definitions) and 40 Code of Federal Regulations (CFR) §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at

an account, as defined in §101.1 of this title (relating to Definitions), a used engine from anywhere outside that account;

- (E) in response to and during the existence of any officially declared disaster or state of emergency;
- (F) directly and exclusively by the owner or operator for agricultural operations necessary for the growing of crops or raising of fowl or animals; or
 - (G) as chemical processing gas turbines;
- (8) any stationary diesel engine placed into service before June 1, 2007, that:
- (A) operates less than 100 hours per year, based on a rolling 12-month basis; and
- (B) has not been modified, reconstructed, or relocated on or after June 1, 2007. For the purposes of this subparagraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at

an account, as defined in §101.1 of this title, a used engine from anywhere outside that account;

- (9) any new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after June 1, 2007, that:
- (A) operates less than 100 hours per year, based on a rolling 12-month basis, in other than emergency situations; and
- (B) meets the corresponding emission standard for non-road engines listed in 40 CFR §89.112(a), Table 1 (October 23, 1998), and in effect at the time of installation, modification, reconstruction, or relocation. For the purposes of this paragraph, the terms "modification" and "reconstruction" have the meanings defined in §116.10 of this title and 40 CFR §60.15 (December 16, 1975), respectively, and the term "relocated" means to newly install at an account, as defined in §101.1 of this title, a used engine from anywhere outside that account;
- (10) boilers and industrial furnaces that were regulated as existing facilities by 40 CFR Part 266, Subpart H, as was in effect on June 9, 1993;
- (11) brick or ceramic kilns with a maximum rated capacity less than 5.0 MMBtu/hr;

- (12) low-temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing in which nitrogen-containing resins, or other additives are used;
- (13) stationary, gas-fired, reciprocating internal combustion engines with a horsepower (hp) rating less than 50 hp;
 - (14) electric arc melting furnaces used in steel production;
- (15) forming ovens and forming processes used in mineral wool-type fiberglass manufacturing; and
- (16) natural gas-fired heaters used exclusively for providing comfort heat to areas designed for human occupancy.
- (b) Units located in Wise County exempted from the provisions of this division, except as specified in §§117.440(i), 117.445(f)(4), 117.450, and 117.452 of this title (relating to Final Control Plan Procedures for Reasonably Available Control Technology), include the following:

- (1) industrial, commercial, or institutional process heaters with a maximum rated capacity less than 40 MMBtu/hr;
- (2) stationary gas turbines and stationary internal combustion engines that are used as follows:
 - (A) in research and testing of the unit;
- (B) for purposes of performance verification and testing of the unit;
 - (C) solely to power other engines or gas turbines during startups;
- (D) exclusively in emergency situations, except that operation for testing or maintenance purposes of the gas turbine or engine is allowed for up to 100 hours per year, based on a rolling 12-month basis; and
- (E) in response to and during the existence of any officially declared disaster or state of emergency;
 - (3) stationary, diesel, reciprocating internal combustion engines;

- (4) stationary, dual-fuel, reciprocating internal combustion engines; [and]
- (5) stationary, gas-fired, reciprocating internal combustion engines with a hp rating less than 50 hp;[.]

(6) flares; and

(7) incinerators with a maximum rated capacity less than 40 MMBtu/hr.

- (c) The emission specifications in §117.410(a)(1) and (c) of this title [(relating to Emission Specifications for Eight-Hour Attainment Demonstration)] do not apply to gas-fired boilers during periods that the owner or operator is required to fire fuel oil on an emergency basis due to natural gas curtailment or other emergency, provided:
- (1) the fuel oil firing occurs during the months of November, December, January, or February; and
- (2) the fuel oil firing does not exceed a total of 72 hours in any calendar month specified in paragraph (1) of this subsection.

SUBCHAPTER G: GENERAL MONITORING AND TESTING REQUIREMENTS
DIVISION 1: COMPLIANCE STACK TESTING AND REPORT REQUIREMENTS
§117.8000

Statutory Authority

The amended section is proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended section is also proposed under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant

emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended section is also proposed under Federal Clean Air Act (FCAA), 42 United States Code (USC) §§7401, *et seq.*, which requires states to submit State Implementation Plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021; and FCAA, 42 USC §§7401, *et seq.*

§117.8000. Stack Testing Requirements.

- (a) When required by this chapter, the owner or operator of a unit subject to this chapter shall conduct testing according to the requirements of this section.
- (b) The unit must be operated at the maximum rated capacity, or as near as practicable. Compliance must be determined by the average of three one-hour emission test runs. Shorter test times may be used if approved by the executive director.
 - (c) Testing must be performed using the following test methods:

- (1) Test Method 7E or 20 (40 Code of Federal Regulations (CFR), Part 60, Appendix A) for nitrogen oxides (NO_x);
- (2) Test Method 10, 10A, or 10B (40 CFR Part 60, Appendix A) for carbon monoxide (CO);
 - (3) Test Method 3A or 20 (40 CFR Part 60, Appendix A) for oxygen (O₂);
- (4) for units that inject ammonia or urea to control NO_x emissions, the Phenol-Nitroprusside Method, the Indophenol Method, or the United States Environmental Protection Agency (EPA) Conditional Test Method 27 for ammonia;
- (5) Test Method 2 (40 CFR Part 60, Appendix A) for exhaust gas flow and following the measurement site criteria of Test Method 1, §11.1 (40 CFR Part 60, Appendix A), or Test Method 19 (40 CFR Part 60, Appendix A) for exhaust gas flow in conjunction with the measurement site criteria of Performance Specification 2, §8.1.3 (40 CFR Part 60, Appendix B); or
- (6) American Society for Testing and Materials (ASTM) Method D1945-91 or ASTM Method D3588-93 for fuel composition; ASTM Method D1826-88 or ASTM

Method D3588-91 for calorific value; or alternate methods as approved by the executive director and the <u>EPA</u> [United States Environmental Protection Agency].

- (d) <u>EPA-approved</u> [United States Environmental Protection Agency-approved] alternate test methods or minor modifications to the test methods specified in subsection (c) of this section may be used, as approved by the executive director, as long as the minor modifications meet the following conditions:
- (1) the change does not affect the stringency of the applicable emission specification;
 - (2) the change affects only a single source or facility application.
- (e) An owner or operator that chooses to install or relocate a boiler or process heater temporarily at an account for less than 60 consecutive calendar days may substitute the following in lieu of the requirements of subsections (b) (d) of this section for stack testing required by this chapter. For the purposes of this subsection, the term "relocate" means to newly install at an account, as defined in §101.1 of this title (relating to Definitions), a boiler or process heater from anywhere outside of that account.

- (1) The owner or operator may use the results of previous testing conducted on the same boiler or process heater conducted according to subsections (b) (d) of this section or a manufacturer's guarantee of performance. If previous testing is used, the owner or operator of the site temporarily installing the boiler or process heater shall maintain a record of the previous test report as specified by the recordkeeping requirements under this chapter applicable to the site.
- (2) The owner or operator shall physically remove the boiler or process heater from the account no later than 60 consecutive calendar days after the unit was installed at the account or comply with the testing requirements as specified in subsections (b) (d) of this section.
- (3) Extensions to the 60 consecutive calendar days limitation of this subsection will not be provided.
- (f) ASTM Method D6348-03 may be used to determine NO_x or CO emissions from stationary internal combustion engines in lieu of the test methods for NO_x or CO specified in subsection (c) of this section if the owner or operator of the stationary engine subject to the testing requirements of this section meets the conditions of this subsection. All other applicable requirements in subsection (c) of this section continue to apply.

- (1) Written notification of the use of ASTM Method D6348-03 must be submitted to the appropriate regional office and any local air pollution control agency having jurisdiction at least 15 days in advance of the date of testing.
- (2) The analyte spiking procedure in Annex A5 to ASTM Method D6348-03 must be performed using NO_x calibration gas standards certified for total NO_x .
- (3) All requirements outlined in Annexes A1 through A8 to ASTM Method D6348-03 must be followed. The test report must contain the information specified in §117.8010 of this title (relating to Compliance Stack Test Reports) in addition to information demonstrating compliance with all requirements of ASTM Method D6348-03, including Annexes A1 through A8.
- (4) Minor modifications to ASTM Method D6348-03 may be used, as approved by the executive director, as long as the minor modifications meet the conditions of subsection (d)(1) and (2) of this section.

SUBCHAPTER H: ADMINISTRATIVE PROVISIONS

DIVISION 1: COMPLIANCE SCHEDULES

§117.9030

Statutory Authority

The amended section is proposed under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The amended section is also proposed under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant

emissions; and THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended section is also proposed under Federal Clean Air Act (FCAA), 42 United States Code (USC) §§7401, et seq., which requires states to submit State Implementation Plan revisions that specify the manner in which the National Ambient Air Quality Standards will be achieved and maintained within each air quality control region of the state.

The amended section implements THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, and 382.021; and FCAA, 42 USC §§7401, *et seq*.

§117.9030. Compliance Schedule for Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources.

- (a) Reasonably available control technology emission specifications.
- (1) The owner or operator of any stationary source of nitrogen oxides (NO_x) in the Dallas-Fort Worth eight-hour ozone nonattainment area that is a major source of NO_x and is subject to §117.405(a) or (b) of this title (relating to Emission Specifications for Reasonably Available Control Technology (RACT)) shall comply with the requirements of Subchapter B, Division 4 of this chapter (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources) as follows:

(A) for units that were subject prior to February 20, 2020:

(i) submission of the initial control plan required by §117.450 of this title (relating to Initial Control Plan Procedures) was required by June 1, 2016; and

(ii) for units subject to the emission specifications of §117.405 of this title, compliance with all other requirements of Subchapter B, Division 4 of this chapter was required by January 1, 2017, and these units shall continue to comply with the requirements of Subchapter B, Division 4 of this chapter; and

(B) for units that become subject on or after February 20, 2020:

(i) submission of the initial control plan required by §117.450 of this title is required no later than January 15, 2021; and

(ii) for units subject to the emission specifications of §117.405 of this title, compliance with all other requirements of Subchapter B, Division 4 of this chapter is required as soon as practicable, but no later than July 20, 2021.

[(A) submit the initial control plan required by §117.450 of this title (relating to Initial Control Plan Procedures) no later than June 1, 2016; and]

[(B) for units subject to the emission specifications of §117.405(a) or (b) of this title, comply with all other requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than January 1, 2017.]

- (2) The owner or operator of any stationary source of NO_x that becomes subject to the requirements of §117.405 of this title on or after the applicable compliance date specified in paragraph (1) of this subsection, shall comply with the requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than 60 days after becoming subject.
- [(3) Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, the owner or operator of a unit located at a major stationary source of NO_x located in Wise County is not required to comply with the requirements of Subchapter B, Division 4 of this chapter.]
 - (b) Eight-hour ozone attainment demonstration emission specifications.

- (1) The owner or operator of any stationary source of NO_x in the Dallas-Fort Worth eight-hour ozone nonattainment area that is a major source of NO_x and is subject to §117.410(a) of this title (relating to Emission Specifications for Eight-Hour Attainment Demonstration) shall comply with the requirements of Subchapter B, Division 4 of this chapter as follows:
- (A) submit the initial control plan required by $\S117.450$ of this title no later than June 1, 2008; and
- (B) for units subject to the emission specifications of §117.410(a) of this title, comply with all other requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than:
- (i) March 1, 2009, for units subject to §117.410(a)(1), (2), (4), (5), (6), (7)(A), (8), (10), and (14) of this title;
- (ii) March 1, 2010, for units subject to §117.410(a)(3), (7)(B), (9), (11), (12), and (13) of this title;
- (C) for diesel and dual-fuel engines, comply with the restriction on hours of operation for maintenance or testing in §117.410(f) of this title, and associated recordkeeping in §117.445(f)(9) of this title (relating to Notification,

Recordkeeping, and Reporting Requirements), as soon as practicable, but no later than March 1, 2009; and

(D) for any stationary gas turbine or stationary internal combustion engine claimed exempt using the exemption of §117.403(a)(7)(D), (8), or (9) of this title (relating to Exemptions), comply with the run time meter requirements of §117.440(i) of this title (relating to Continuous Demonstration of Compliance), and recordkeeping requirements of §117.445(f)(4) of this title, as soon as practicable, but no later than March 1, 2009.

(2) The owner or operator of any stationary source of NO_x that becomes subject to the requirements of Subchapter B, Division 4 of this chapter on or after the applicable compliance date specified in paragraph (1) of this subsection, shall comply with the requirements of Subchapter B, Division 4 of this chapter as soon as practicable, but no later than 60 days after becoming subject.